HARRY HERSBACH TOOLS BV

specialist in machining tools

2023

COMBIDEX®

solid solutions to improve your business

TMA

SOLID CARBIDE THREAD MILLS FOR ALUMINUIM

THREADING | MILLING | THREAD MILLING | TURNING | DRILLING | GROOVING & PARTING

Thread-Mill Solid Carbide

TMA Solid Carbide Thread Mills for Aluminum Machining

Combidex introduces a new line of solid carbide thread mills for High-speed Aluminum machining.

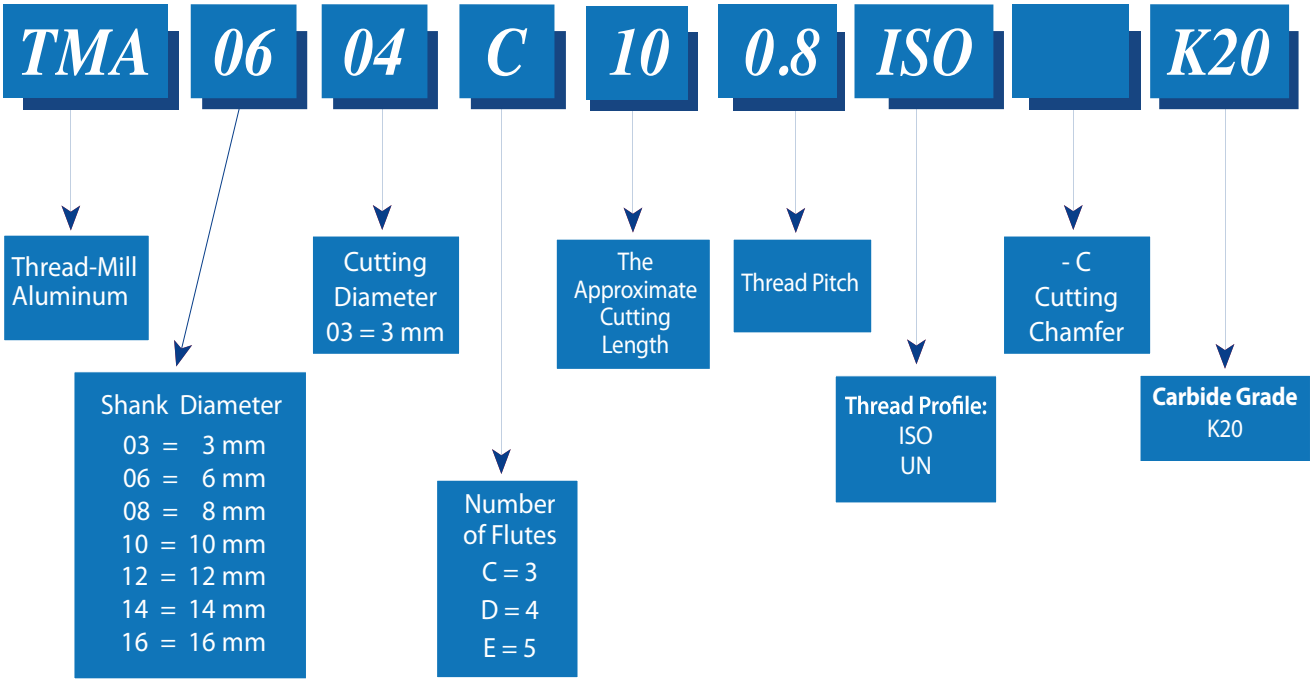
High-speed aluminum machining requires tools that minimize the tendency of Aluminum to stick to the tool cutting edges, provides high surface finish, ensuring efficient chip evacuation and sufficient strength of the cutting edge to absorb the cutting forces.

Features

- Optimized carbide grade for Aluminum, cast iron and stainless steels
- Cylindrical shank (Weldon shank- upon request)
- With internal coolant bore
- Uncoated, smooth cutting edge
- High thread surface quality
- Same tool for right hand or left hand internal threads
- Additional items with cutting chamfer

Thread-Mill Solid Carbide

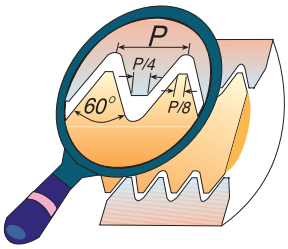
Product Identification
Ordering Codes

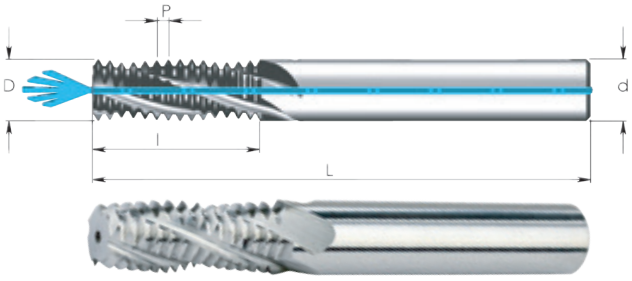


Thread-Mill Solid Carbide

ISO With internal coolant bore

Tools for Internal thread





Thread length: 2xD

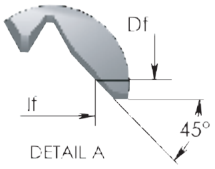
Grade	P	M	K	N	S	H
K20	○	○	●	●	●	

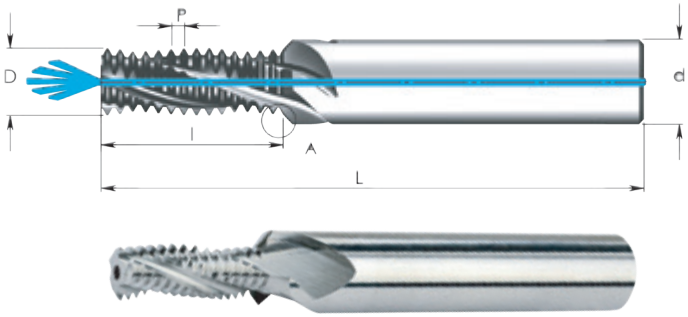
Pitch mm	M coarse	M fine	Ordering Code	d	D	No. of Flutes	l	L
0.5	M3	M4	* TMA 03024C6 0.5 ISO	3	2.4	3	6.8	39
0.5		M5	TMA 06043C10 0.5 ISO	6	4.3	3	10.8	58
0.7	M4		TMA 06031C8 0.7 ISO	6	3.1	3	8.8	58
0.75		M6	TMA 0605C13 0.75 ISO	6	5.0	3	13.1	58
0.8	M5		TMA 0604C10 0.8 ISO	6	4.0	3	10.8	58
1.0	M6		TMA 06048C13 1.0 ISO	6	4.8	3	13.5	58
1.0		M10	TMA 0808D21 1.0 ISO	8	8.0	4	21.5	64
1.25	M8	M10	TMA 08064C16 1.25 ISO	8	6.4	3	16.9	64
1.5	M10		TMA 0808C21 1.5 ISO	8	8.0	3	21.8	64
1.5		M14	TMA 12112D29 1.5 ISO	12	11.2	4	29.3	84
1.75	M12		TMA 10095D25 1.75 ISO	10	9.5	4	25.4	73
2.0	M16	M17	TMA 14126D35 2.0 ISO	14	12.6	4	35.0	83

* Without internal coolant

ISO With internal coolant bore and cutting Chamfer

Tools for Internal thread





Thread length: 2xD

Grade	P	M	K	N	S	H
K20	○	○	●	●	●	

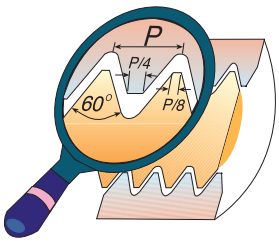
Pitch mm	M coarse	M fine	Ordering Code	d	D	Df	No. of Flutes	l	lf	L
0.8	M5		TMA 0604C10 0.8 ISO-C	6	4.0	5.3	3	10.8	11.5	58
1.0	M6		TMA 08048C13 1.0 ISO-C	8	4.8	6.4	3	13.5	14.3	64
1.25	M8	M10	TMA 10064C16 1.25ISO-C	10	6.4	8.3	3	16.9	17.9	73
1.5	M10		TMA 1208C21 1.5 ISO-C	12	8.0	10.4	3	21.8	23.0	84

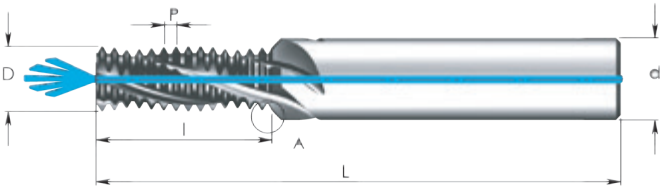
● First choice ○ Alternative

Thread-Mill Solid Carbide

UN With internal coolant bore

Tools for Internal thread





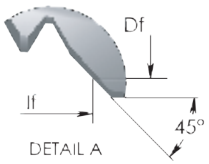
Thread length: 2xD

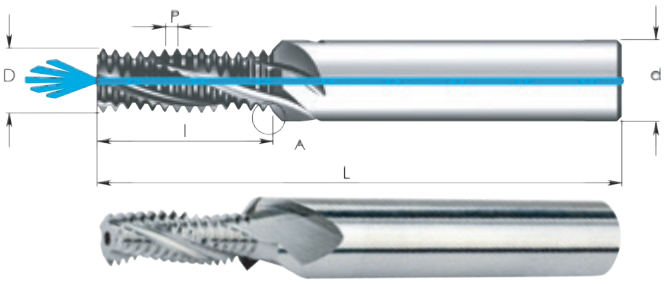
Grade	P	M	K	N	S	H
K20	○	○	●	●	●	

Pitch TPI	UNC	UNF	UNEF	Ordering Code	d	D	No. of Flutes	l	L
32	8	10	12	**TMA 06032C9 32 UN**	6	3.2	3	9.1	58
28		1/4		**TMA 06052C14 28 UN**	6	5.2	3	14.0	58
24		3/8	9/16-5/8	**TMA 0808D20 24 UN**	8	8.0	4	20.6	64
20	1/4			**TMA 06048C14 20 UN**	6	4.8	3	14.6	58
20		7/16		**TMA 10092C23 20 UN**	10	9.2	3	23.5	73
18	5/16			**TMA 0606C17 18 UN**	6	6.0	3	17.6	58
18		9/16-5/8	1 1/8 - 1 5/8	**TMA 1212D30 18 UN**	12	12.0	4	30.3	84
16	3/8			**TMA 08074C21 16 UN**	8	7.4	3	21.4	64
16		3/4		**TMA 1616E38 16 UN**	16	16.0	5	38.9	105

UN With internal coolant bore and cutting Chamfer

Tools for Internal thread





Thread length: 2xD

Grade	P	M	K	N	S	H
K20	○	○	●	●	●	

Pitch TPI	UNC	UNF	UNEF	Ordering Code	d	D	Df	No. of Flutes	l	lf	L
20	1/4			**TMA 08048C14 20 UN-C**	8	4.8	6.8	3	14.6	15.6	64
18	5/16			**TMA 1006C17 18 UN-C**	10	6.0	8.4	3	17.6	18.8	73
16	3/8			**TMA 12074C21 16 UN-C**	12	7.4	10.0	3	21.4	22.7	84

● First choice ○ Alternative

Thread-Mill Solid Carbide

Cutting Data

Carbide grade K20: Uncoated Sub- Micron carbide grade for Aluminum and non- ferrous materials, Stainless Steels and Titanium.

ISO Standard	Materials	Cutting Speed m/min	Feed mm/tooth Cutting Diameter = D		
			D ≤ 4	4 < D < 9	D ≥ 9
P	Low & Medium Carbon Steels < 0.55%C	50-140	0.005-0.03	0.01-0.05	0.02-0.10
	High Carbon Steels ≥0.55%C	60-130	0.005-0.02	0.01-0.04	0.02-0.09
	Alloy Steels, Treated Steels				
M	Stainless Steel-Free Cutting	40-120	0.005-0.02	0.01-0.04	0.02-0.09
	Stainless Steel-Austenitic				
	Cast Steels	70-120	0.005-0.03	0.01-0.05	0.02-0.10
K	Cast Iron	50-120	0.005-0.03	0.01-0.05	0.02-0.10
N	Aluminum ≤12%Si, Copper	130-250	0.005-0.04	0.01-0.06	0.02-0.13
	Aluminum >12%Si	80-180	0.005-0.04	0.01-0.06	0.02-0.13
	Synthetics, Duroplastics, Thermoplastics	80-180	0.005-0.04	0.01-0.06	0.02-0.13
S	Nickel alloys, Titanium alloys	20- 80	0.005-0.02	0.01-0.04	0.02-0.09

COMBIDEX®